

1. SITE AND OPERATIONS OVERVIEW

1.1 SUMMARY

The Portsmouth Gaseous Diffusion Plant (PORTS) is located on a 5.8-square-mile site in a rural area of Pike County, Ohio. U.S. Department of Energy (DOE) activities at PORTS include environmental restoration, waste management, and operation of nonleased facilities. Production facilities for the separation of uranium isotopes are leased to the United States Enrichment Corporation (USEC). USEC activities are not covered by this document, with the exception of the environmental monitoring programs discussed in Chap. 4 and radiological dose information in Chap. 5.

1.2 INTRODUCTION

PORTS is owned by DOE. Effective July 1, 1993, DOE leased the production facilities at the site to USEC, which was established by the Energy Policy Act of 1992. USEC became a publicly-held corporation in 1998. Lockheed Martin Utility Services managed and operated the leased facilities for USEC through May 17, 1999, at which time USEC assumed these responsibilities. Bechtel Jacobs Company LLC has managed the DOE programs at PORTS since April 1, 1998.

This report is intended to fulfill the substantive requirements of DOE Order 5400.1, *General Environmental Protection Program*. This DOE Order requires development of an Annual Site Environmental Report that includes information on regulatory compliance, environmental programs, radiological and non-radiological monitoring programs, groundwater programs, and quality assurance. This report is not intended to present all of the monitoring data at PORTS. Additional data collected for other site purposes, such as environmental restoration and waste management, are presented in other documents that have been prepared in accordance with applicable laws. These data are available through other mechanisms.

1.3 DESCRIPTION OF SITE LOCALE

DOE/PORTS is located in a rural area of Pike County, Ohio, on a 5.8-square-mile site (see Fig. 1.1). The site is 2 miles east of the Scioto River in a small valley running parallel to and approximately 120 feet above the Scioto River floodplain. Fig. 1.2 depicts the plant site and its immediate environs.

Pike County has approximately 24,250 residents. Scattered rural development is typical; however, the county contains numerous small villages such as Piketon, Wakefield, and Jasper that lie within a few miles of the plant. The county's largest community, Waverly, is about 10 miles north of the plant and has a population of about 4,500 residents. The nearest



Fig. 1.1. Location of PORTS within the State of Ohio.

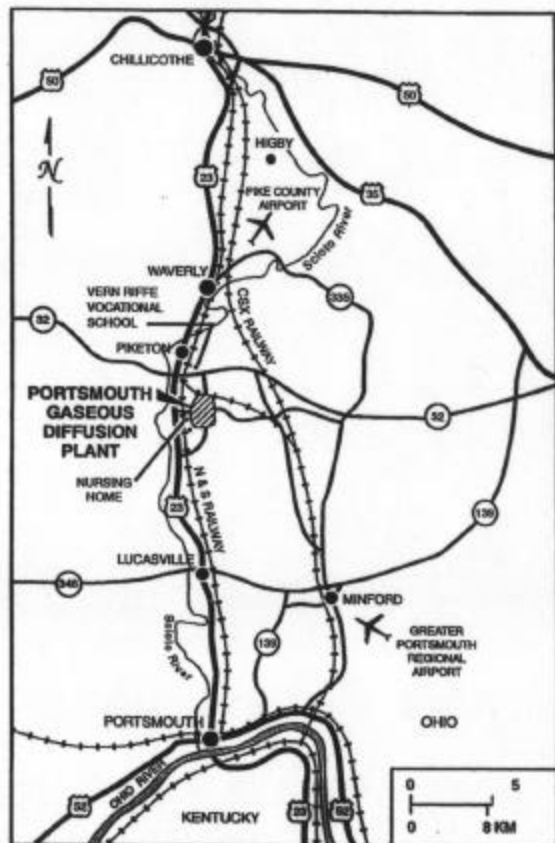


Fig. 1.2. Location of PORTS in relation to the geographic region.

residential center in this area is Piketon, which is about 5 miles north of the plant on U.S. Route 23; its population is about 1,700. Several residences are adjacent to the southern half of the eastern boundary and along Wakefield Mound Road (old U.S. 23), directly west of the plant. One nursing home, with a capacity of 36 persons, is located along Wakefield Mound Road.

Additional population centers within 50 miles of the plant are Portsmouth (population 22,249), 27 miles south; Chillicothe (population 21,923), 27 miles north; and Jackson (population 6,144), 18 miles east. The total population within 50 miles of the plant is approximately 600,000 persons (1990 U.S. Census).

1.4 DESCRIPTION OF SITE OPERATIONS

DOE, through its managing contractor Bechtel Jacobs Company, operates the Environmental Restoration, Waste Management, and Uranium Programs at the plant, as well as other nonleased DOE property. The Environmental Restoration Program performs remedial investigations to define the nature and extent of contamination, evaluate the risk to public health and the environment, and

determine the available alternatives from feasibility studies of potential remedial actions for sites under investigation. The goal of the Environmental Restoration Program is to verify that releases from past operations and waste management at DOE/PORTS are thoroughly investigated and that remedial action is taken to protect human health and the environment.

The Waste Management Program is responsible for managing wastes generated at the site. Wastes must be identified and stored in accordance with all environmental regulations. The Waste Management Program also arranges transportation and off-site disposal of wastes. The goal of the Waste Management Program is to manage waste from the time it is generated to its ultimate treatment, recycling, or disposal in accordance with all applicable regulations.

The Uranium Program is responsible for the cost-effective management of PORTS facilities and real property retained by DOE. Responsibilities include managing contracts between DOE/PORTS and other subcontractors for such services as maintenance, utilities, chemical operations, uranium material handling, and laboratory analysis. The Uranium Program also oversees the management and coordination of the PORTS Depleted Uranium Hexafluoride and Lithium Management and Storage Programs and warehousing of uranium materials.